

DESCRIPTIONS OF AUSTRALIAN CURCULIONIDÆ, WITH
NOTES ON PREVIOUSLY DESCRIBED SPECIES.

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PART V.

[Read July 2, 1907.]

SUB-FAMILY LEPTOPSIDES.

MANDALOTUS.

Erichson referred this genus to the *Otiorhynchides* near *Tyloderes*; Lacordaire questioned its position there, but as it was unknown to him could not satisfactorily place it, and provisionally placed it at the end of the *Eremnides*; Pascoe referred *Dysostines* (a synonym of *Mandalotus*) to the *Rhyparosomides*. I believe the correct position of the genus to be in the *Leptopsides*, close to *Polyphrades*.

The eyes, the scrobes, and the triangular plate at apex of rostrum are very similar to those of most species of *Polyphrades*, as are also the loose way the four front coxæ are inserted, the shape of the side-pieces of the meso- and metasternum, and the transverse corrugations of the concealed part of the base of the head. The sexes also differ in much the same way.

The peculiar round, flattened granules of the prothorax are much the same as in many species of *Essolithna*, which genus is certainly very close to *Polyphrades*.

Many of the species have also a subtubercular elevation just behind the front coxæ, as in the species of *Leptops* and other genera of the *Leptopsides*, but it is often partially concealed.

The scrobes are slightly variable, but their shape is so often partially concealed by clothing that they cannot be satisfactorily used. Above each scrobe, towards the base, there is usually, if not always, a groove (sublateral sulcus) as in the species of *Leptops*, but this also is partly or entirely concealed by clothing.

The ocular lobes are distinct ⁽¹⁾ and are always ciliated, but they are usually not so strong as in *Polyphrades*. The rostrum is slightly longer than in most species of that genus; but apart from this and the entirely free claws of *Mandalotus* it would be often difficult or impossible to distinguish the two genera.

(1) In *pilosus* and *pinquis* these lobes are absent; but, as will be noted below, these species belong to *Timareta*.

The antennæ are seldom of use for description; they differ somewhat in thickness, but the basal joints of the funicle are always longer than the others, and the first nearly always longer than the second; from some directions, however, the second often appears to be longer than, or at least as long as, the first.

The scutellum, when present, is always small, but it is so frequently either quite absent or concealed by scales and mud, that it is not a feature to be relied upon. It sometimes appears to be present, moreover, even when really absent; this being due to scales or mud becoming compacted at its position.

The base of the abdomen appears always to be margined with a row of large punctures, but these are sometimes almost or quite concealed by the clothing.

The front coxæ vary through all gradations from touching to widely separated—a most unusual feature in any genus of weevils. Between them the prosternum is always divided; at the rear of the division (when the coxæ are distinctly separated) the derm is truncate, but in front there is a more or less conical or rounded process touching the truncated part. There is a certain amount of variation in the degree at which the claws diverge; in some the divergence being slight, in others moderate, but they are never either widely divergent or soldered together at the base.

The derm is often entirely concealed by the clothing, so that to see the colour and sculpture it is necessary to partially abrade one or more specimens. The species are also so frequently covered with mud that even the clothing is concealed, and sometimes stained. I have had specimens for hours in water, and been afterwards unable to remove the mud only, as if too rough a brush is used the clothing comes off as well as the mud. The punctures always appear to be much smaller than they really are, and the carina of the rostrum and the median impression of the prothorax are often partly or entirely concealed.

I do not think that any species of this genus should be described unless one or more specimens has been partially abraded. With unique or rare specimens it is not desirable to entirely abrade the surface, but in such cases I have abraded part of the disc of the prothorax and part of the elytra near the suture and base. It is unsafe as a rule to describe species of which only the females are known, but I have described *niger*, as, even if the type specimens are females, they are unusually distinct.

The clothing is often variegated, and the pattern of the variegation is usually, if not always, variable. The colour is

often not trustworthy, as many of the species appear to have forms in which the derm (especially of the elytra) may be either black or brown, or even of a livid red.

The sexes are usually well defined, and the genus may be readily divided into three groups depending on male characters:—

1. Male with intercoxal process of mesosternum produced into a laminated or conical process.
2. Male with basal segment of abdomen carinate or tuberculate.
3. Mesosternum and abdomen simple in both sexes.

The elytral punctures are usually much larger in the male than in the female, although before abrasion there is not much apparent difference between them. The male is also usually smaller and narrower; with more strongly curved tibæ. In many of the species the tibæ (especially the front pair) are ciliated, but (with the exception of *inusitatus*) only in the male, and in the following descriptions it has not been considered necessary to comment on its absence in the females. The hind tibæ are sometimes dentate or carinate in the male, but never in the female. Where the front coxæ are distinctly separated, the space between them is usually slightly less in the male than in the female, owing to the slightly greater enlargement of his coxæ.

Many species which at first sight strongly resemble each other are seen to be very distinct when the sexual characters or the space separating the front coxæ are examined. The prothoracic sculpture on abrasion is often very useful in distinguishing apparently closely-allied species.

Few of the species appear to be at all widely distributed; and many of them are to be taken at the roots of beach-growing plants; others occur under logs and stones, and a few under bark.

The following table of species known to me is arranged principally for convenience of identification. With the probable exception of *niger*, it is drawn up exclusively from males; to attempt a table that would include females would, I believe, tend only to confuse instead of assist; for this reason *punctiventris* (of which I have only a female) is not included:—

- | | | | | | |
|---|---|-----|-----|-----|------------------------------|
| A. Mesosternum with a laminated intercoxal process. | | | | | |
| a. | The process extending to middle of front coxæ | ... | ... | ... | <i>intercoxalis</i> , n. sp. |
| aa. | The process much shorter | ... | ... | ... | |
| | b. Base of process flat | ... | ... | ... | <i>hoplostethus</i> , Pasc. |
| | bb. Base of process convex | ... | ... | ... | <i>simulator</i> , n. sp. |

- AA. Mesosternum with a more or less conical intercoxal process.
- c. Apical half of elytra irregular *crudus*, Er.
- cc. Apical half of elytra regular.
- d. Setæ of upper surface rather dense, long, and thin *variabilis*, n. sp.
- dd. Setæ of upper surface much sparser, shorter, and stouter *vacillans*, n. sp.
- AAA. Mesosternum without a laminated or conical intercoxal process.
- B. Middle of basal segment of abdomen impinging on second *ventralis*, Blackb.
- BB. Middle not so impinging.
- C. Abdomen carinate or tuberculate.
- e. Basal segment of abdomen bituberculate *geminatus*, n. sp.
- ee. Basal segment with a median tubercle *tuberculiventris*, n. sp.
- eee. Basal segment with a longitudinal carina on each side of middle *excavatus*, Lea.
- eccc. Basal segment with a transverse or curved apical or subapical carina.
- f. Front coxæ touching *bryophagus*, n. sp.
- ff. Front coxæ feebly separated.
- g. Basal segment of abdomen incurved to middle of apex *Blackburni*, n. sp.
- gg. Basal segment straight at apex *litoralis*, n. sp.
- fff. Front coxæ distinctly and usually widely separated.
- h. Elytra tuberculate.
- i. Apex of hind tibiæ suddenly and strongly incurved *longicollis*, n. sp.
- ii. Apex almost straight *arciferus*, n. sp.
- hh. Elytra non-tuberculate.
- j. Suture with small shining granules.
- k. All segments of abdomen with shining granules *granulatus*, n. sp.
- kk. Third and fourth segments without such granules *carinativentris*, n. sp.
- jj. Suture without such granules.
- l. Abdominal carina feebly arched *imitator*, n. sp.
- ll. Abdominal carina strongly arched.
- m. Alternate interstices raised *Carteri*, n. sp.
- mm. Alternate interstices not raised.
- n. Scutellum small and shining *sabulosus*, n. sp.
- nn. Scutellum not traceable *Sydneyensis*, n. sp.
- CC. Abdomen not carinate or tuberculate.
- D. Upper surface glabrous *glaber*, Blackb.

- DD. Upper surface distinctly and usually densely clothed.
- E. Elytra tuberculate.
- o. Hind tibiæ dentate at base ... *scaber*, Lea.
- oo. Hind tibiæ not dentate at base.
- p. Under surface with long pubescence *mirabilis*, n. sp.
- pp. Under surface without such pubescence.
- q. Space between middle coxæ not much more than that between front pair.
- r. Front tibiæ not ciliated ... *niger*, n. sp.
- rr. Front tibiæ densely ciliated *Coatesi*, n. sp.
- qq. Space between middle coxæ much greater than between front pair *campylocnemis*, Lea
- EE. Elytra non-tuberculate (at least elsewhere than about shoulders).
- F. Prothoracic granules transversely arranged or subcarinate.
- s. Abdomen sparsely clothed ... *Crawfordi*, Blackb.
- ss. Abdomen densely clothed.
- t. Size very small.
- u. Base of elytra gently and regularly emarginate ... *arcuatus*, n. sp.
- uu. Base of elytra trisinate ... *trisinuat*, n. sp.
- tt. Size above average *setosus*, n. sp.
- FF. Prothoracic granules not so arranged.
- G. Scape very stout.
- v. Prothorax with large isolated granules or small tubercles *nodicollis*, n. sp.
- vr. Prothoracic granules not large and isolated ... *crassicornis*, n. sp.
- GG. Scape at most moderately stout.
- H. Hind tibiæ bidentate ... *Fergusoni*, n. sp.
- HH. Hind tibiæ not bidentate.
- I. Prothoracic granules not obscured by clothing.
- w. Basal segment of abdomen with granules ... *seticollis*, n. sp.
- ww. Basal segment without granules *reticulatus*, Lea.
- II. Prothoracic granules partially obscured or absent.
- J. Front coxæ more or less widely separated.
- x. Emargination of apex of prosternum sudden and deep ... *amplicollis*, Lea.
- xx. Emargination not sudden and deep.
- y. Suture between basal segments of abdomen almost obsolete in middle *sterilis*, Er.?

- yy. Suture distinct across middle.
- z. Prothorax (on abrasion) with very minute granules on disc.
- a. Front tibiæ with long and moderately dense ciliation ... *similis*, n. sp.
- aa. Front tibiæ with rather short and feeble ciliation ... *ochreonotatus*, n. sp.
- zz. Prothorax (on abrasion), with large but almost obsolete granules ... *Blackmorei*, n. sp.
- zzz. Prothorax (on abrasion), with distinct granules on disc.
- b. Front tibiæ densely ciliated at apex... *piliventris*, Lea.
- bb. Front tibiæ feebly ciliated at apex.
- c. Base of elytra trisinate . *humeralis*, n. sp.
- cc. Base regularly emarginate.
- d. Front tibiæ dentate ... *arenaceus*, n. sp.
- dd. Front tibiæ edentate ... *albonotatus*, n. sp.
- JJ. Front coxæ not widely separated.
- K. Derm nowhere black *pallidus*, Lea.
- KK. Derm black, at any rate in parts.
- L. Suture (on abrasion) decidedly paler than second interstice ... *suturalis*, Lea.
- LL. Suture black or almost so.
- M. Front coxæ touching.
- e. Club reddish ... *maculatus*, n. sp.
- ee. Club black or almost black *inuitatus*, n. sp.

- MM. Front coxæ
not touching.
- N. Length of eyes
greater than
space between
them ... *pusillus*, Lea.
- NN. Length less
than space be-
ween them.
- O. Prothoracic
s c u l p -
ture not en-
tirely con-
cealed be-
fore abra-
sion ... *subglaber*, Lea.
- OO. Prothoracic
s c u l p -
ture en-
tirely con-
cealed be-
fore abra-
sion.
- P. Hind tib-
iæ sud-
d e n l y
n a r -
r o w e d
about the
middle . *cellaris*, Pasc.?
- PP. Hind tib-
iæ not
s u d -
d e n l y
n a r -
r o w e d
there ... *spurcus*, Lea.

Notes on above Table.

eee. This carina usually, but not always, marks the hinder margin of a flattened space.

ii. Except for the usual inflation of apex.

r. There are the usual setæ on the tibiæ, however.

F. The prothorax has the granules so arranged that there appear to be fine striæ separating them into sub-parallel lines; the arrangement as a rule being fairly easily seen through the clothing, and always distinct on abrasion.

G. In *amplicollis* and several other species the scape is stouter than usual, but in these two it is quite remarkably stout.

v. These can only be seen after abrasion, however.

II. In many of the species the granules are readily traceable, but the clothing usually prevents the granules themselves from being seen.

Excluding *pilosus*, Blackb., and *pinguis*, Lea, which do not belong to the genus, and are referred to below, the following is a list of the species hitherto described:—

<i>crudus</i> , Er.	
<i>rigidus</i> , Er.	
<i>sterilis</i> , Er.	
<i>vetulus</i> , Er.	
<i>Dysostines fuliginus</i> , Pasc.	
<i>valgus</i> , Pasc.	(<i>Dysostines</i>).
<i>pilipes</i> , Pasc.	(„).
<i>hoplostethus</i> , Pasc.	(„).
<i>pustulosus</i> , Pasc.	(„).
<i>cellaris</i> , Pasc.	(„).
<i>Crawfordi</i> , Blackb.	(„).
<i>ventralis</i> , Blackb.	(„).
<i>punctiventris</i> , Blackb.	(„).
<i>glaber</i> , Blackb.	(„).
<i>advena</i> , Blackb.	(„).
<i>campylocnemis</i> , Lea.	
<i>piliventris</i> , Lea.	
<i>scaber</i> , Lea.	
<i>ampliocollis</i> , Lea.	
<i>spurcus</i> , Lea.	
<i>excavatus</i> , Lea.	
<i>suturalis</i> , Lea.	
<i>pallidus</i> , Lea.	
<i>reticulatus</i> , Lea.	
<i>pusillus</i> , Lea.	
<i>subglaber</i> , Lea.	

MANDALOTUS STERILIS, Er.

Twelve specimens of a narrow species from Ulverstone (near the original locality in Tasmania) probably belong to this species; they are somewhat variable in markings, as are most species of the genus.

Mr. Blackburn says of the type, “the suture between the first and second ventral segments is extremely fine”; this is the case with my specimens *across* the middle (in fact in some specimens the suture in the very middle seems quite obliterated), but at the sides it is well defined, although not so deep or wide as those of the following segments. This character will readily distinguish it from most species, but in this, and many other characters, it strongly resembles the female of *ventralis*.

The prothoracic granules are traceable to a certain extent through the clothing, and on abrasion are seen to be large, round, and feeble; the elytral punctures in the striæ are (for

the genus) decidedly small, being much narrower than the interstices. The degree in which the alternate interstices are raised above their fellows is somewhat variable. The prothorax has a median line, but it is quite concealed normally. The size varies from $4\frac{3}{4}$ to 6 mm.

The sexes are very ill-defined; in some males, however, the front tibiæ are more strongly curved on the apical third, and the basal portion is supplied below with a narrow keel, which sometimes is rather suddenly terminated, but both curvature and keel are not of constant strength, and those of some males are not to be distinguished from some females. In the male also the basal segment of the abdomen has an arcuate apical median space slightly depressed below the basal portion (but not concave).

MANDALOTUS CRUDUS, Er.

In specimens in good condition the median prothoracic impression is scarcely, or not at all, traceable.

MANDALOTUS VENTRALIS, Blackb.

Remarkably distinct by the abdomen of the male. I have specimens from King Island and Tasmania, as well as from South Australia (the original locality). The specimens before me vary from dark brown, with pale markings, to almost white, with more or less distinct brown spots.

MANDALOTUS VALGUS, Pasc.

In describing *campylocnemis* and *scaber*, I compared them with a species I supposed to be *valgus*; this species, although it closely agrees with the figure of that species, and in many respects with the description, I now find was wrongly identified, and I have described it as *intercoxalis*.

MANDALOTUS CELLARIS, Pasc.

Mr. Masters (from whom the types of this species were received) has given me three Sydney females as belonging to this species; they differ, however, from the description in being smaller (only two lines including the rostrum in its normal position), and have not the hind tibiæ "*intus fortiter bisinuatæ*" (probably, however, a masculine character). I have also two specimens (sexes) from the Nepean River, belonging to the same species, and of which the male has the hind tibiæ (as seen from the sides) regularly dilated to about the middle, and thence strongly arcuate to the apex: seen directly from above or below also, the apical third appears much narrower than the basal two-thirds. From *spurcus* it differs in having the front coxæ more distant, and the median line less distinct, as well as in the hind tibiæ.

MANDALOTUS SCABER, Lea.

The base of the hind tibiæ of the male of this species has an acute transverse carina, somewhat as in the male of *crudus*, but more acute and much nearer the base.

MANDALOTUS PILOSUS, Blackb.

I have a specimen of this species (named by Mr. Blackburn himself, and agreeing with his description) which was somewhat doubtfully referred to *Dysostines*. The ocular lobes are entirely absent, and the front coxæ are contiguous. I refer it, without doubt, to *Timareta*.

MANDALOTUS PINGUIS, Lea.

Also now referred to *Timareta*, as in its absence of ocular lobes and contiguous front coxæ it agrees with the preceding, and with *crinita*.

MANDALOTUS INTERCOXALIS, n. sp.

Male. Blackish, antennæ and parts of legs dull red. Densely clothed with muddy-brown, feebly-variegated scales, the paler ones forming feeble rings on legs. With stout, suberect or decumbent setæ, rather sparse elsewhere than on legs; basal segments of abdomen with finer setæ than elsewhere; front tibiæ with rather fine setæ, but not ciliated.

Rostrum with carina concealed, except at base and apex. Second joint of funicle slightly longer than first. *Prothorax* with a median line and a transverse waved impression, both partially concealed; with minute, scattered, quite-concealed granules. *Elytra* trisinate at base; with obtuse tubercles, more distinct at summit of posterior declivity than elsewhere; with rows of large round punctures. *Mesosternum* with a laminated process extending to middle of front coxæ. Basal segment of *abdomen* concave. *Legs* stout; front coxæ widely separated; tibiæ curved at apex, especially the front pair. Length $6\frac{1}{4}$ mm.⁽²⁾

Hab.—New South Wales: Cooma.

The elytral punctures appear to be considerably narrower than the interstices, but after abrasion they are seen to be almost or fully as wide. The intercoxal process of the mesosternum is twice as long as its greatest width (which is about one-third from the base), is flat, but at the apex slightly turned up, it is narrowed towards the base and towards the apex, but not at the apex itself, and is densely squamose, except at its base; the process of *hoplostethus* is much shorter (not once and one-half as long as wide), strongly curved, and almost glabrous.

(2) The lengths given are exclusive of the rostrum.

MANDALOTUS SIMULATOR, n. sp.

Male. Black, in places dull red; antennæ and parts of legs reddish. Densely clothed with pale muddy-brown scales, feebly variegated in places with paler and darker scales; legs feebly alternately banded with pale and dark scales. With stout, suberect setæ, varying from pure white to almost black; tibiæ with sparse ciliation in addition to setæ.

Rostrum without visible carina. Two basal joints of funicle equal in length. *Prothorax* feebly transverse, sides strongly rounded, with a distinct median line; with obtuse, quite-concealed granules. *Scutellum* small but distinct. *Elytra* conjointly arcuate at base (but apparently trisinuate from some directions, owing to thickening of the third interstices at base), subtuberculate in places: with rows of large round punctures. *Mesosternum* with a laminated process about as long as wide. *Abdomen* with basal segments flat in middle. *Legs* stout; front coxæ widely separated; front tibiæ strongly curved at apex. Length 4-5½ mm.

Hab.—New South Wales: Nepean River (A. J. Coates).

So far as it is possible to judge before abrasion, one of the specimens is entirely of a rather pale red or livid yellow, two others appear to have the body entirely dark, except for the tubercular elevations, which are of a rather dull red; the femora of one of these latter are almost black, but in the other they are not much darker than the tibiæ. The elytra appear to have numerous feeble whitish spots in two of the three specimens before me: their setæ are not regularly distributed, and are almost confined to the alternate interstices; the abdomen is not so densely clothed as the upper surface. The elytral punctures appear to be rather small, but on abrasion many are seen to be even wider than the interstices. The intercoxal process of the mesosternum is distinctly shorter than in *hoplostethus*, and convex (instead of flattened) at its base, but then curved round as in that species.

MANDALOTUS VARIABILIS, n. sp.

Male. Black or dark brown; legs (wholly or in part) and antennæ of a dull red. Densely clothed with muddy or slaty-brown scales, variegated with patches or spots of paler scales. Densely clothed with rather long and fine setæ, depressed on prothorax, suberect on elytra; under-surface and legs with rather dense fine setæ, but with scales very sparse and confined to small spots.

Rostrum with narrow and well-defined carina. Antennæ rather stout. *Prothorax* with strongly-rounded sides, with numerous shining unipunctuate granules. *Scutellum* small but distinct. *Elytra* conjointly arcuate at base, with series of

large, almost regular punctures, interstices gently and regularly convex. *Mesosternum* with a briefly conical intercoxal process. *Abdomen* rather densely granulate, two basal segments conjointly concave. *Legs* rather stout; front coxæ moderately separated; tibiæ inflated at apex, and all more or less feebly granulate below. Length 5-5½ (female 5½-7) mm.

Female. Differs in being larger and wider, mesosternum simple, basal segment of abdomen impressed on the apical half of its middle only, the second not at all concave, tibiæ less curved, and the elytral punctures much smaller (before abrasion, however, they appear to be of the same size).

Hab.—Tasmania: Hobart, Nubeena (at roots of beach-growing plants).

The clothing is very variable: on numerous specimens (especially males) it is of a slaty-brown colour, with small but fairly-distinct paler spots; the spots may be confined to the sides and apex, or extend across the disc (both of prothorax and elytra) as well; in some specimens scales are more of a yellowish-brown colour, with (or without) feeble paler spots; the clothing of the head is usually, but not always, paler than on the rostrum. The scales on the prothorax are sparser than on the elytra, but the setæ are considerably denser, although less distinct; the elytral setæ are not confined to alternate interstices. The granules on the prothorax, although usually placed amongst rather dense scales, are quite distinct before abrasion, and each has a central puncture: the median line is usually distinct, but is never deep or wide, occasionally it is partially concealed by the setæ and scales. In the male the punctures in the striæ are not much narrower than the interstices, but in the female they are considerably narrower: in both sexes, however, their size is obscured by the clothing. The mesosternal process is much as in *crudus*, but the abdomen is more decidedly concave, the elytra are entirely without tubercles, and the hind tibiæ are edentate: the clothing also is different.

MANDALOTUS VACILLANS, n. sp.

Male. Black; antennæ (scape darker than funicle), tarsi, apex of tibiæ and base of femora of a dull red. Densely clothed with scales varying from almost white to almost black. With moderately stout and not very dense setæ, also variable in colour.

Rostrum with carina distinctly traceable through, but concealed by, clothing; scrobes less curved than usual. Scape strongly dilated towards apex. *Prothorax* with numerous round flattened granules, traceable through, but concealed by, clothing; median line feeble or absent. *Elytra* conjointly arcuate at base; with series of large, round, regular, more or

less concealed punctures; fifth interstice with a feeble sub-tubercular swelling posteriorly. *Mesosternum* with a very obtusely conical intercoxal process. *Abdomen* with basal segments feebly convex in middle. *Legs stout*; front coxæ moderately separated; front tibiæ not strongly curved, the others almost straight. Length $4\frac{1}{4}$ mm.

Hab.—Tasmania: Hobart (A. M. Lea).

I believe the female of this species is before me, but as I am not quite certain of it, it is not further commented upon.

The three apical segments of the abdomen and the coxæ are sometimes of a dull red. On one specimen the scales are almost black, with feeble pale rings on the legs and a few pale spots on the elytra and sides of prothorax. In another the scales on the upper surface are mostly of a dingy white, mottled with pale and dark brown; in another the scales are slaty brown, with numerous pale spots; in others they are muddy brown, with hardly any variegation. Usually there is a feeble stripe on each side of the prothorax. The setæ, although not confined to alternate interstices, are not regularly distributed. Seen from above, the rostrum appears to have three parallel, partially-concealed carinæ. Before abrasion the prothorax appears to be closely covered with fairly large, round, flattened granules; but these on abrasion are seen to be considerably smaller, although not very small. The interstices are scarcely separately convex, and are about the width of the punctures, although, before abrasion, they appear to be much wider. The intercoxal process of the mesosternum is almost rounded and nowhere suddenly lessened in width, and the abdomen is gently convex; one specimen before me, possibly, however, representing a variety or an undescribed species, has the abdomen gently concave along the middle of the two basal segments, these features readily distinguishing it from *crudus* and the preceding species; but in general appearance it has little in common with those species.

MANDALOTUS GEMINATUS, n. sp.

Male. Blackish; antennæ (scape darker than funicle), legs (parts of femora excepted or not) and apical half of abdomen of a dull red. Densely clothed with soft muddy-brown scales, feebly variegated with paler scales on the shoulders, sides of prothorax, and on head and rostrum; under surface with rather pale scales. With stout subdepressed setæ.

Rostrum without visible carina. Two basal joints of funicle stout and subtriangular. *Prothorax* feebly transverse, sides subangularly dilated near apex; median line very narrow and quite concealed; with rather sparse, minute, feeble granules, not traceable through clothing. *Elytra* elongate-

cordate, conjointly arcuate at base, shoulders strongly rounded; with series of large, almost concealed punctures; interstices regular. *Abdomen* with a large granule or small tubercle on each side, near apex of middle of basal segment. *Legs* stout; front coxæ touching; tibiæ not strongly curved. Length, 4 mm.

Female. Differs in being wider, abdomen simple, tibiæ straighter, and elytral punctures smaller.

Hab.—Queensland: Cairns (E. Allen).

The majority of the setæ should perhaps be regarded as scales, as they are much wider than is usually the case with setæ, each also is pale at its tip; on the disc of both prothorax and elytra they are wider than elsewhere, and on the elytra they are arranged in quite regular rows. Before abrasion the elytral punctures appear to be rather small, and many are quite concealed, but after abrasion those of the male are seen to be wider than the interstices, whilst those of the female are usually not as wide as the interstices.

MANDALOTUS TUBERCULIVENTRIS, n. sp.

Male. Black; antennæ and parts of legs of a dull red. Densely clothed with muddy brown scales, variegated in places (especially on the prothorax) with paler scales. With moderately dense, stout setæ; on the elytra sparser than elsewhere, not regularly distributed, and almost confined to alternate interstices. Tibiæ with rather sparse ciliation.

Rostrum with narrow and usually concealed carina. Scape but slightly dilated towards apex. *Prothorax* with sides strongly rounded; a narrow but deep median line; apparently without granules. *Elytra* conjointly arcuate at base, with rows of large partially-concealed punctures; interstices with tubercular swellings in places, especially about summit of posterior declivity. Basal segment of *abdomen* with a very distinct median tubercle. *Legs* stout; front and middle coxæ widely separated, the separation of about equal width; tibiæ rather strongly curved. Length, 5 mm.

Female. Differs in having the prothorax narrower and elytra wider, abdomen simple, tibiæ less curved, etc.

Hab.—New South Wales: Sydney (A. M. Lea).

The legs are feebly annulated; on the elytra there are usually small dingy whitish spots of scales and setæ; the paler scales of the prothorax are yellowish-brown. On abrasion the prothorax is seen to have no granules on the disc, but rather large and very feeble ones at sides, these being quite concealed normally. Viewed directly from above or below the hind tibiæ appear to be suddenly narrowed from about their middle.

MANDALOTUS BRYOPHAGUS, n. sp.

Male. Blackish; antennæ and legs (wholly or in part) of a rather bright red. Densely clothed with pale muddy brown scales, feebly mottled with paler and darker scales. Setæ pale and moderately numerous.

Rostrum without visible carina. Second joint of funicle very slightly longer than first. *Prothorax* transverse, sides strongly rounded; with numerous rather large, round, flattened granules, concealed by but traceable through clothing; median line absent. *Elytra* trisinuate at base; with rows of large but more or less concealed punctures. *Abdomen* with all the sutures straight, basal segment with a narrow, feebly-curved carina extending across about one-third of, and almost at, the apex. *Legs* stout, front coxæ touching; tibiæ less strongly curved than usual. Length, $3\frac{1}{2}$ - $3\frac{3}{4}$ (female, 4 - $4\frac{1}{4}$) mm.

Female. Differs in being larger and wider, abdomen more convex and simple, tibiæ straighter, etc.

Hab.—Tasmania: Frankford, Hobart (A. M. Lea).

The scape is usually darker than the funicle, the middle of the femora and of the tibiæ are usually darker than the other parts of those limbs; the apical segments of the abdomen are sometimes reddish. The mottling of the upper surface is usually very slight, but in some specimens the paler or darker scales appear as small distinct spots. On the elytra the setæ, although not confined to the first, third, and fifth interstices, are more conspicuous on those than on the others. On abrasion, the elytral punctures of the male are seen to be very large and round, in places being twice the width of the interstices; in the female they are usually about the width of the interstices. These before abrasion appear to be much wider (in both sexes) than the punctures; in some specimens also they appear to be feebly alternately raised. The trisination of the elytra is caused by the third interstice being subtuberculate at base. The suture between the first and second abdominal segments is perfectly straight; a most unusual feature, although not unique in the genus. The carina of the basal segment, although sufficiently distinct, is apt to be partially concealed by the clothing. The seven specimens before me were all taken in moss.

MANDALOTUS BLACKBURNI, n. sp.

Male. Black; funicle, club, and tarsi reddish. Densely clothed with dark slaty-brown or sooty-brown scales, somewhat paler on undersurface; legs feebly or not at all annulated. With rather dense stout setæ.

Rostrum with a narrow carina, concealed by but distinctly traceable through clothing. Scape moderately but

regularly dilated to apex. *Prothorax* feebly transverse, sides strongly and regularly rounded; with numerous rather large, round, flattened granules, densely clothed but readily traceable; median line feeble and sometimes absent. *Elytra* with the regular emargination of base slightly interrupted by the third interstices; with rows of large, round, partially-concealed punctures, alternate interstices very feebly raised, suture and usually the third with minute shining (but sometimes quite concealed) granules. *Abdomen* with small more or less concealed granules; basal segment at apex incurved to middle, with a distinct shining slightly-curved carina near apex, and about one-third the width of apex. *Legs* very stout; front coxæ feebly separated: tibiæ rather feebly curved, the front pair feebly denticulate below. Length, $4\frac{1}{2}$ -5 (female, $4\frac{1}{4}$ - $5\frac{1}{2}$) mm.

Female. Differs in having the prothorax narrower and elytra wider, punctures smaller, abdomen more convex and simple and tibiæ straighter.

Hab.—Tasmania: Hobart, Launceston, Stonor, Jordan River (A. M. Lea).

The clothing is occasionally feebly mottled, and in some specimens the alternate interstices are slightly paler than the others. On the upper surface the setæ are usually dark, but on the elytra many of them are whitish, the rows also are not all the same distance apart. The prothoracic granules on abrasion are seen to be each supplied with a distinct puncture (for the reception of a seta), and with other very small ones (for the scales). In the male the elytral punctures are of about equal width with the interstices, but in the female they are smaller; the granules are often confined to the suture and third interstice, but they are occasionally also present on the second. The claws are closer together than usual.

Readily distinguished from the preceding species by the curved apex of the basal segment of abdomen. The two species, however, are not much alike. I sent specimens of this species to the Rev. T. Blackburn, and of them he wrote:—"They are quite distinct from all my species and from Erichson's. The narrower and more brightly coloured specimens (male, I suppose) bear a certain resemblance to *sterilis*, Er., but that species has alternate interstices carinate, suture quite strongly carinate behind, rostral carina much feebler and shorter, no carina on ventral segments (unless I am mistaken in considering it a male)," etc., etc.

MANDALOTUS LITORALIS, n. sp.

Male. Black; antennæ and legs (wholly or in part) reddish. Densely clothed with brown, mottled with sooty scales

With moderately dense, suberect setæ, usually dark, but whitish in places.

Rostrum, *scape*, and *prothorax* much as in the preceding species. *Elytra* regularly arcuate at base; with series of large round punctures, as wide as interstices or wider, but appearing much smaller through clothing; interstices regular. *Abdomen* with small more or less concealed granules, all the sutures straight; basal segment at apex with a depressed shining almost straight carina, extending across less than one-third of apex. *Legs* stout; front coxæ feebly separated; tibiæ rather feebly curved and all more or less feebly denticulate below. Length, $3\frac{1}{4}$ - $3\frac{3}{4}$ mm.

Female. Differs in having narrower prothorax and wider elytra, simple abdomen and straighter tibiæ.

Hab.—Tasmania: Hobart (on sea-beach. A. M. Lea).

On the elytra the bulk of the scales are of a rather pale brown, with the sooty scales in irregular blotches; on the prothorax the sooty scales cover a larger area than the paler ones. In one of the two males before me both hind tibiæ have a minute inner tooth about one-third from apex. The claws are as close together as in the preceding species, from which it is readily distinguished by the straight abdominal suture, in consequence of which the basal segment is fully twice the length of the second along the middle, instead of about once and a half as in that species. From *bryophagus* it is distinguished by the slightly separated front coxæ and regularly arcuate base of elytra, etc.

MANDALOTUS ARCIFERUS, n. sp.

Male. Black; antennæ, tibiæ, and tarsi reddish. Densely clothed with muddy-brown scales; with rather long suberect setæ. Tibiæ with a rather thin fringe of long cilia.

Rostrum with carina rather feebly traceable through clothing. Antennæ thin; scape rather suddenly thickened at apex; first joint of funicle fully once and one-half the length of second. *Prothorax* feebly transverse, sides strongly but not uniformly rounded; median line narrow and usually concealed; closely covered with large, flattened, and more or less rounded granules, not very distinctly traceable through clothing. *Elytra* trisinate at base, base not quite as wide as near apex of prothorax; with subtubercular elevations in places; with series of large, round, more or less irregular, and usually concealed punctures. *Abdomen* with a semi-circular, flat, shining basal space on basal segment, marked outwardly by a distinct carina, apex strongly incurved to middle. *Legs* stout; front coxæ widely, the middle still more widely separated; tibiæ rather thin, the front pair strongly bisinate be-

low, the others rather feebly bisinuate. Length, $4\frac{1}{2}$ - $5\frac{1}{2}$ mm.

Female. Differs in having the prothorax narrower and elytra wider, abdomen simple, appendages shorter, tibiæ stouter, the front pair much less strongly bisinuate and the others almost straight.

Hab.—Tasmania (Macleay Museum): King Island (Jas. A. Kershaw and A. M. Lea); Victoria: Mordialloc (National Museum).

The scales on most of the specimens before me (except for feeble rings on the legs) are quite uniformly coloured, but on some there are very feeble traces of pale spots. The setæ are rather denser and longer than usual, although not so dense or thin as in *variabilis*; they are mostly dark-brown in colour, but many are straw-coloured; on the lower surface they are thinner than on the upper. The prothoracic granules are rather large and less uniform than in the two preceding species, but are much less distinct through the clothing. Many of the elytral punctures are also scarcely traceable, but on abrasion they are seen to be much wider than the interstices, and not in quite regular rows; the interstices themselves are decidedly irregular, and on abrasion are seen to be highly polished and without punctures. The subtubercular elevations vary on different specimens.

The male has an abdominal plate somewhat as in *ventralis*; but the flattened space is transverse and does not infringe on the second segment; in *ventralis* the first segment along its middle is about thrice the length of the second; but in the present species the first is but slightly longer than the second. The carina also appears almost to connect the hind coxæ together; at its apex it does not touch the apex of the segment; and the tibiæ are very different.

MANDALOTUS LONGICOLLIS, n. sp.

Male. Black; antennæ, tibiæ (partly or entirely), and tarsi reddish. Densely clothed with dark muddy-brown scales, with rather stout, semi-decumbent setæ. Tibiæ fringed with long cilia.

Rostrum with a narrow carina, more or less concealed, except towards apex. Antennæ rather thin. *Prothorax* (by measurement) slightly longer than wide, sides regularly rounded; median line narrow and partly concealed; with numerous fairly large, rounded (scarcely flattened) granules, not very distinct before abrasion. *Elytra* strongly trisinuate at base, interstices subtuberculate in places, with rows of large more or less concealed punctures. *Abdomen* with a flattened space curved towards and extending almost to apex, and bounded behind by a feeble carina, apex feebly incurv-

ed to middle. *Legs* stout; front coxæ very widely separated; front tibiæ strongly bisinuate, hind pair strongly incurved at apex. Length, $6\frac{1}{2}$ mm.

Hab.—New South Wales: Jindabyne (H. J. Carter).

On the sides and shoulders of prothorax the scales are rather paler than elsewhere, but in the only specimen before me they are nowhere distinctly variegated. On the elytra the setæ are rather sparsely and irregularly distributed, elsewhere they are fairly dense. The prothoracic granules are not clearly defined through the clothing. The third interstice at its base is thickened to a much greater extent than usual, is thickened again at its middle, and then depressed below the others; the punctures are somewhat irregular and are usually wider than the interstices; although before abrasion apparently much smaller or quite absent. The interstices on abrasion are seen to be shining, almost or quite impunctate and with minute scattered granules (these quite invisible normally). The middle of the prosternum is slightly concave in front of and slightly concave behind the median sulcus, and is marked with large punctures, and which are not at all concealed by scales. The apex of the abdominal plate is terminated by a feeble, almost double carina (this appearance being due to an impression along its middle), at its middle it quite touches the apex.

In general appearance rather close to the preceding species, but the prothorax longer than wide, with larger and less flattened granules, elytra more decidedly trisinuate at base, and abdominal carina different. The antennæ are much the same, but are not quite so long, the scape is not so suddenly thickened at apex, and the basal joint of funicle is shorter. The hind tibiæ have the same remarkable apex as in the male of *ventralis*, but are longer and thinner and are without granules; the basal segment of abdomen is also incurved instead of outcurved at the middle of its apex.

MANDALOTUS GRANULATUS, n. sp.

Black; antennæ and appendages (these in parts stained with black) reddish. Densely clothed with muddy-brown feebly-variegated scales; legs feebly ringed. With rather numerous straw-coloured setæ. Tibiæ with thin setæ, but not fringed with long cilia.

Rostrum with a narrow carina, concealed on basal half. Antennæ rather stouter than in the preceding species, with the scape more sinuous. *Prothorax* (by measurement) just perceptibly longer than wide, with a feeble concealed median line, granules much as in preceding species. *Elytra* trisinuate at base; alternate interstices slightly raised, first and

third with numerous (the others with few or none) small shining setose granules; punctures not very distinct through clothing, and on abrasion narrower than interstices. *Under-surface* with small shining granules, more numerous and rather larger on abdomen than elsewhere. Basal segment of *abdomen* feebly incurved at apex, with a strong carina extending about half way across near (its middle on) the apex, moderately curved at sides, its middle very feebly incurved. *Legs* moderately stout; front coxæ widely separated; femora with a few minute granules; tibiæ granulate below, front pair strongly curved, the others almost straight. Length, 7 mm.

Hab.—Tasmania: Mount Wellington (A. M. Lea).

Each granule of both upper and lower surfaces bears a seta, although all the setæ do not rise from granules.

In general appearance close to the preceding species, but the prothorax slightly shorter; the elytra with granules larger, more numerous, and quite distinct before abrasion, not so strongly trisinate at base, the shoulders more advanced, subtuberculate only at base, the punctures smaller, the hind tibiæ and the abdominal granules and carina different.

Two females, from Hobart and Launceston, probably belong to this species; they differ from the male in having the prothorax feebly transverse, the elytra with numerous pallid spots, the abdomen more convex and non-carinate, the tibiæ straighter, and the granules on the legs not quite so conspicuous.

MANDALOTUS CARINATIVENTRIS, n. sp.

Male. Black; antennæ and legs dull red. Densely clothed with muddy-brown, mottled with paler and darker, scales; legs feebly ringed; with rather long and stout setæ, less numerous and regular but more conspicuous on elytra than on prothorax.

Rostrum with carina concealed by clothing, but distinctly traceable throughout. *Prothorax* apparently as long as wide, sides strongly and evenly rounded; median line partially concealed; with dense, round, flat, fairly large granules, distinctly traceable through clothing. *Elytra* with basal arcuation feebly sinuous; with regular rows of large, partially-concealed punctures; interstices very feebly alternately raised, the first to third with minute shining granules. *Abdomen* with numerous small granules on first and fifth segments, and a few very indistinct ones on second; first feebly incurved at apex, with a strong, shining, feebly-curved carina, the middle of its apex on apex of segment. *Legs* strong; front coxæ widely separated; tibiæ granulate below, the front pair strongly curved towards apex, apex itself (as also that

of the second pair) acutely produced; claws very feebly separated. Length, 6 mm.

Female. Differs in being more robust, abdomen more convex and without carina, tibiæ straighter, etc.

Hab.—Tasmania: Frankford (in moss), Swansea (A. M. Lea).

The scape is darker than the funicle, and the legs are not of uniform colour. On one specimen the apical scales of the femora are almost golden, on several some of the scales on head and apex of rostrum have a distinct bluish gloss; there is usually a small patch of pale scales on each side near the scutellum. The minute elytral granules are quite distinct in both sexes before abrasion, the interstices from above seem perfectly uniform, but from behind feebly alternately raised; they appear to be much wider than the punctures, but on abrasion are seen to be only about the same width.

Shorter and more robust than the preceding species, granules less conspicuous, and on the third and fourth abdominal segments quite absent; the front tibiæ are also acutely produced at the apex, whilst in the preceding species the produced part (although appearing pointed from some directions) is really in the form of a flange, slightly incurved at its apex. The abdominal carina is almost as in *Blackburni*, but the front coxæ are rather widely separated instead of almost touching as in that species.

MANDALOTUS IMITATOR, n. sp.

Densely covered with muddy-brown scales, feebly variegated on prothorax and base of elytra; with moderately long subdecumbent setæ.

Rostrum rather stouter than usual, carina traceable throughout, but uncovered only on apical third. *Antennæ* rather short, but not very stout. *Prothorax* feebly transverse, sides strongly and evenly rounded; granules much as in preceding species; without median line. *Elytra* conjointly arcuate at base; with large, partially-concealed punctures; interstices quite regular. *Abdomen* as in the preceding species, except that the carina does not quite touch the middle of apex. *Legs* stout: front coxæ widely separated; tibiæ dentate below, front pair strongly curved towards and swollen at apex, then somewhat acutely produced. Length, $6\frac{1}{2}$ mm.

Hab.—Tasmania: Swansea (A. M. Lea).

The type and only specimen I have seen is entirely of a dull or livid red (except as to its clothing), but this may be due to immaturity. Probably its colours are like those of most species, *i.e.*, black, with more or less red appendages. On the elytra the setæ are rather long and of two colours—

dark-brown and whitish; on the prothorax they are shorter and almost black. Before abrasion the interstices seem much wider than the punctures; but after, they are seen to be of equal width.

In appearance very close to the preceding species; but the elytra entirely without granules; the apex of the front tibiæ is intermediate in character between that species and *granulatus*, in having only one side of the flange produced.

MANDALOTUS CARTERI, n. sp.

Male. Colour and clothing much as in *longicollis*.

Rostrum with carina concealed. *Antennæ* thin. *Prothorax* moderately transverse, sides strongly rounded; median line feeble, with very feeble tubercles, scarcely traceable before abrasion. *Elytra* scarcely trisinate at base; interstices elevated, with rows of large, partially-concealed punctures. *Abdomen* much as in *arciferus*, but the middle of the carina distant fully one-third from the apex of basal segment. *Legs* stout; front coxæ widely separated; front tibiæ strongly bisinate below, middle pair swollen on basal half, and strongly curved on apical half, hind pair feebly curved, not strongly incurved at apex. Length, 6 mm.

Hab.—New South Wales: Jindabyne (H. J. Carter), Mount Kosciusko (R. Helms).

The clothing of the under surface is rather sparse, and consists mostly of fine setæ, but that of the upper surface and of the legs is almost exactly as in *longicollis*; but the abdominal carina and hind tibiæ are very different to those of that species. In *arciferus*, which at a glance it strongly resembles, the carina is much nearer the apex, and the prothoracic and elytral sculpture are seen to be very different on abrasion.

MANDALOTUS SABULOSUS, n. sp.

Male. Dark reddish-brown, appendages paler. Densely covered with slaty-grey scales, sometimes more or less mottled; with moderately long and thin semi-erect setæ. Tibiæ with a rather thin fringe of cilia.

Eyes smaller and more convex than usual. *Rostrum* with carina uncovered throughout. *Antennæ* thin, first joint of funicle fully once and one-half the length of second. *Prothorax* moderately transverse, sides strongly and almost uniformly rounded; median line usually distinct; with dense, round, flattened granules, only partially concealed. *Scutellum* small but distinct, and shining. *Elytra* almost truncate at base, elongate subcordate; with rows of comparatively small, partially-concealed punctures; interstices gently and regularly convex. *Abdomen* densely punctured, the two basal

segments wrinkled as well; basal with a narrow curved apical carina. *Legs* strong; front coxæ rather widely separated; tibiæ granulate below, rather strongly inflated at apex, the front pair more noticeably curved than the others. Length, 5½-6 mm.

Female. Differs in being rather more robust, abdomen more convex, less wrinkled, and non-carinate, and the tibiæ straighter.

Hab.—Tasmania: Ulverstone, Swansea (A. M. Lea).

A narrow species readily distinguished from most others by the scarcely emarginate base of elytra and shining scutellum, the latter being distinct in all the numerous specimens before me. The scales on the upper surface are sometimes quite uniform in colour, but they are often variegated with spots of paler scales; towards the apex of the elytra there are often patches of pale and dark scales, quite strongly contrasted. The setæ of the legs are unusually long. The scales of the prothorax are very readily abraded, so that its disc often appears to be almost glabrous. The rostral carina is distinctly traceable throughout; behind it, on the head, there is a distinctly impressed line. The abdominal carina at its middle touches the apex of the segment, but it is not very conspicuous, owing to the way that segment is wrinkled, and it does not extend across one-third of the width. The species is abundant at the roots of beach-growing plants.

MANDALOTUS SYDNEYENSIS, n. sp.

Male. Dark, reddish-brown; coxæ and apex of abdomen paler, antennæ, tibiæ, and tarsi still paler. Densely clothed with slaty-grey scales, mottled with small spots of brown. Clothed with long, thin, pale, semi-erect setæ. Tibiæ ciliated.

Rostrum with moderately distinct carina. *Antennæ* thin, first joint of funicle not much longer than second. *Prothorax* much as in the preceding species, except that the granules are not so distinct; *elytra* shorter, but otherwise much the same. *Scutellum* absent, or at least not visible. *Abdomen* as in the preceding species, except that the punctures are stronger, the wrinkles less conspicuous and the carina more so. *Legs* much the same. Length, 5 mm.

Hab.—New South Wales: Sydney (H. W. Cox).

In appearance close to the preceding species, with which it agrees in the subtruncate base of elytra and in the sexual differences, but it is shorter and with the setæ (especially on the elytra) distinctly longer; the scutellum also appears to be quite absent. The rostral carina, although not covered with scales, is partly obscured by setæ.

MANDALOTUS MIRABILIS, n. sp.

Male. Black; antennæ and tarsi reddish. Densely clothed with muddy-brown scales. With moderately dense but rather short setæ, which on the elytra are irregularly distributed. Under surface, except on sides, with long, thin straw-coloured hair. Front tibiæ with dense and long cilia.

Rostrum stout, carina distinct throughout. Antennæ rather thin. *Prothorax* decidedly transverse, sides very strongly rounded, apex subtubular; with numerous oblong or elliptic granules, more or less transversely or obliquely arranged. *Elytra* somewhat sinuous at base, with a rather large tubercular swelling just behind each shoulder on the side, elsewhere (especially about and on posterior declivity) with subtubercular elevations. *Abdomen* concave along middle. *Legs* strong; front coxæ widely separated: tibiæ wider than usual, all more or less strongly curved, the hind pair distorted at apex. Length, $9\frac{1}{2}$ mm.

Hab.—New South Wales: Illawarra (Australian or Macleay Museum).

Larger and probably more distinct than any other known species. From the description of *valgus*, and all other species, the long clothing of the under surface will readily distinguish it; this clothing appears to be of three kinds—long thin hair clothing most of the under surface, towards the sides interspersed with stout setæ, and at the sides scales. The front tibiæ have denser and perhaps longer ciliæ than any other species here noted; the hind tibiæ are rather sparsely and the middle tibiæ scarcely ciliated. The clothing is so dense as almost to prevent the sculpture being traced through it; on abrasion the prothorax is seen to have a distinct median line, and to be covered with numerous granules appearing like interrupted carinæ. The scutellum appears to be of comparatively large size, although normally quite concealed. The elytral punctures are often quite hidden, but are large, round, and wider (except at the thickened parts) than the interstices. Each of the middle coxæ appears to be concave internally, or to be supplied with an arcuate carina, the convex side of which is towards the side. The hind tibiæ are very strongly and suddenly inflated and curved at the apex (in addition to the ordinary curvature), this portion being highly polished internally; at its inner apex it is terminated by three small spines or teeth; the tarsi are set on the inflated portion. The front tibiæ appear to be slightly twisted, with a carina or ridge marking the upper side of each.

MANDALOTUS NIGER, n. sp.

Black; funicle, club, and tarsi reddish. Very densely

clothed with black scales, becoming greyish on parts of the legs and under surface; with short, stout, more or less decumbent setæ.

Rostrum stout; carina covered with scales, but feebly traceable throughout. *Antennæ* moderately stout. *Prothorax* moderately transverse, sides strongly rounded; median line partly concealed; with numerous large, rounded granules or small tubercles, not very clearly traceable through clothing. *Elytra* conjointly but not quite regularly arcuate at base, subtuberculate in places, and especially about posterior declivity; with large, round, almost concealed punctures. *Abdomen* feebly convex. *Legs* stout; front coxæ widely separated; tibiæ feebly curved, the posterior almost straight. Length, 6-7 mm.

Hab.—New South Wales: Blue Mountains (E. W. Ferguson).

On the prothorax the setæ vary from straw-coloured to black, on the elytra they are nearly all deep black, and are short, stout, and very irregularly distributed. The elytral punctures are as wide as the interstices, but the clothing is so dense that they appear much smaller, and many are quite concealed.

Two specimens are before me, both apparently of one sex, and probably females. I have described them, however, as even as females they represent a very distinct species. In build they have a certain resemblance to *amplicollis*, but apart from the clothing, the emargination of apex of prosternum is much less sudden and deep.

MANDALOTUS COATESI, n. sp.

Male. Black; antennæ, legs, and apical half of abdomen reddish. Densely clothed with uniformly pale muddy-brown scales. With stout and rather pale setæ, sparser, and more irregularly distributed on elytra than elsewhere: under surface with thin setæ. Front tibiæ densely ciliated.

Rostrum stout, antennæ rather thin. *Prothorax* feebly transverse, sides regularly rounded; median line partly concealed; with numerous, large, round, flattened granules, readily traceable through clothing. *Elytra* trisinate at base: subtuberculate in places: with large, round punctures, much wider than interstices, but appearing much narrower through clothing. *Abdomen* granulate, two basal segments feebly concave. *Legs* stout; front coxæ widely separated: tibiæ granulate below, front pair strongly curved at apex, hind pair dilated to middle, then suddenly narrowed towards (but not at) apex. Length, 4½ mm.

Female. Differs in being more robust, elytral punctures

smaller, abdomen gently convex, tibiæ straighter, the hind pair longer and not so suddenly narrowed beyond the middle.

Hab.—New South Wales: Richmond River (A. J. Coates).

Of the two specimens before me, the female has the rostral carina uncovered throughout, in the male it is uncovered only on the apical half. The hind tibiæ of the male appear to be obtusely dentate at about their middle.

MANDALOTUS ARCUATUS, n. sp.

Male. Blackish; appendages reddish. Densely clothed on both surfaces with pale, muddy-grey scales; with short, stout setæ, longer, sparser, and less depressed on elytra than on prothorax. Front tibiæ with long but sparse cilia.

Rostrum with carina more or less concealed by clothing. Antennæ rather thin. *Prothorax* flattened, moderately transverse, sides strongly and regularly rounded; median line absent; with transverse granules or interrupted carinæ, more or less concealed by clothing. *Elytra* conjointly arcuate at base; with large, round punctures the width of interstices, but appearing much smaller through clothing, interstices regular. *Abdomen* with two basal segments very feebly concave in middle. *Legs* stout, especially front femora; coxæ widely separated, front tibiæ strongly curved at apex. Length, $2\frac{1}{2}$ mm.

Female. Differs in having the prothorax narrower and elytra wider, abdomen gently convex and front tibiæ straighter.

Hab.—New South Wales: Rooty Hill (E. W. Ferguson).

In appearance like a small *Polyphrades*, and the sexes differ in much the same way, but the claws are separated at an angle of about 45 degrees.

MANDALOTUS TRISINUATUS, n. sp.

Male. Reddish-brown, appendages paler.

Rostrum with carina very feebly or not at all traceable through clothing. Antennæ rather thin. *Prothorax* moderately convex and transverse; sides strongly rounded; median line absent; with large transverse granules or interrupted carinæ. *Elytra* trisinate at base; with large round punctures, the width of, or wider than, interstices, but more or less concealed; alternate interstices raised. *Abdomen* with two basal segments gently concave. *Legs* stout; front coxæ rather widely separated, middle coxæ not quite so widely separated; front tibiæ rather strongly curved at apex, hind pair inflated and distorted at apex, and subdentate at basal third internally. Length 3 mm.

Hab.—Victoria: Bright (C. French).

In general appearance and with clothing as in the preceding species, but readily distinguished therefrom by the trisinate base of elytra, which also has the alternate interstices raised; the prothorax is more convex and its granules or carinæ are also decidedly wider and less numerous; the hind tibiæ are also very different.

MANDALOTUS SETOSUS, n. sp.

Male. Densely clothed with muddy-brown, very feebly variegated scales. Prothorax with semi-erect, rather short brown setæ, directed towards the middle from each side; elytra with pale and dark setæ, dense on suture, third, fifth, and seventh interstices, very sparse between these, and absent on sides, except at base and apex. Front tibiæ with comparatively short and sparse cilia.

Rostrum with carina uncovered only on apical third. Antennæ thin, but scape rather suddenly thickened at apex. *Prothorax* feebly transverse, sides strongly and regularly rounded; with numerous slightly-interrupted transverse carinæ, quite distinct through clothing; median line very feebly marked. *Elytra* subtrisinuate at base, sides rather suddenly narrowed at shoulders; with rows of large, round punctures, usually wider than interstices, but appearing very small through clothing; alternate interstices feebly raised. Basal segment of *abdomen* moderately concave in middle, the second flattened there. *Legs* stout; front coxæ rather widely separated. Front tibiæ strongly curved at apex. Length, $6\frac{1}{2}$ mm.

Female. Differs in having prothorax narrower and elytra wider, abdomen convex, and tibiæ straighter.

Hab.—New South Wales: Windsor (A. M. Lea).

In general appearance very close to *piliventris*, but readily distinguished by the transverse sculpture of prothorax; from *Crawfordi* it differs in being larger, alternate interstices elevated, and abdomen densely clothed, with basal segment concave. All the tibiæ are also different.

MANDALOTUS NODICOLLIS, n. sp.

Blackish-brown, parts of antennæ and tarsi paler.

Rostrum very stout, carina quite concealed. Antennæ stout, especially the scape. *Prothorax* strongly transverse, base and apex truncate, sides rather feebly rounded; with large, round, isolated, and not very numerous granules of varying sizes. *Elytra* truncate at base; with large rounded or transversely suboblong punctures, usually wider than interstices; these rather feebly alternately raised. *Abdomen* with basal segment concave along middle and middle of apex.

Legs short and stout; front coxæ feebly separated; tibiæ (comparatively) feebly curved at apex. Length, 3-4½ mm.

Hab.—Queensland: Mackay, Darling Downs (C. French), Gayndah (G. Masters), Brisbane (A. Jefferis Turner), Townsville (H. H. D. Griffith).

Although there are twelve specimens before me, the scales of the upper surface are so uniformly covered with mud⁽³⁾ that it is only in small spots that they can be seen; judging by these the clothing is very dense, and more or less greyish-white; but above the mud, stout, brown, almost perfectly erect setæ arise to a considerable height, both on prothorax and elytra. The under surface and legs are very densely covered with muddy-grey scales interspersed with numerous and rather thin whitish setæ. If the sexes are before me I am unable to distinguish them. The front coxæ are almost touching (with the clothing in position they appear to be in actual contact), the middle tibiæ are separated by a quite round tubercular elevation, but this is usually obscured by scales and mud. The granules of the prothorax, which are very distinctive of this species, and elytral punctures are entirely concealed before abrasion. With the exception of the following species, the scape is stouter than in any other known to me.

MANDALOTUS CRASSICORNIS, n. sp.

Black or dark reddish-brown, appendages paler. Densely clothed with light-brown scales, mottled in places. With fairly stout, rather sparse setæ, sparser on alternate interstices of elytra than elsewhere; under-surface with fine setæ. Tibiæ finely ciliated in male, but not in female.

Rostrum stout, carina covered with scales, but distinctly traceable throughout. Antennæ stout, scape very stout. *Prothorax* moderately transverse, sides strongly and regularly rounded; median line distinct: with numerous flattened, rounded, or irregular granules, clearly traceable through clothing. *Elytra* elongate-cordate, conjointly rather feebly arcuate at base; with rows of round punctures, distinctly narrower than interstices, and appearing very much narrower through clothing; alternate interstices feebly raised. *Abdomen* with basal segment gently concave in male, feebly convex in female. *Legs* stout; front coxæ feebly separated; front tibiæ feebly curved at apex. Length, 4½-4¾ mm.

Hab.—New South Wales: Sydney (on sea-beaches, Taylor Bros.); Queensland: Brisbane (A. Jefferis Turner).

(3) I was not able to remove this without at the same time removing the clothing, even on soaking for several hours in water.

The intensity of colour, especially of the legs, varies, and one specimen is almost entirely red. The mottling of the scales consists of feeble dark spots on the elytra, and feeble, short, lateral stripes on the prothorax, but in only two out of five specimens are the markings at all distinct, whilst in one they are entirely absent. The scape is remarkably stout, at its widest being fully as wide as the space between the scrobes at the apex of rostrum, and much wider than the club; the femora are also much stouter than usual. The sexual differences are but slight.

MANDALOTUS FERGUSONI, n. sp.

Male. Black; appendages somewhat paler, tarsi distinctly paler. Densely covered with muddy-brown scales, variegated with small sooty spots. With short, stout, semi-erect setæ; under-surface with fine setæ in addition to scales. Front and hind tibiæ finely ciliated.

Rostrum with carina quite concealed. *Antennæ* moderately stout. *Prothorax* moderately transverse, sides strongly rounded; median line deeply impressed; with minute scattered granules entirely concealed by clothing. *Elytra* subtrisinuate at base; with large round punctures, much wider than interstices, but appearing much narrower through clothing; alternate interstices feebly raised. Basal segment of *abdomen* feebly concave in middle. *Legs* stout; front coxæ moderately separated; four front tibiæ rather strongly bisinuate, the hind pair strongly but obtusely bidentate internally. Length, 5 mm.

Hab.—New South Wales: Muswellbrook (E. W. Ferguson).

The posterior tooth of the hind tibiæ is just beyond the middle, is more obtuse than the other, and has a peculiarly-granulated appearance. Mr. Ferguson has sent three specimens as belonging to this species, the male described above and two females; the male is perhaps partially abraded of setæ, as on the females they are much more numerous, and being frequently white, both on the prothorax and elytra, they give the upper surface a peculiarly-speckled appearance. On the under surface of the females also the scales are denser and paler, and the setæ sparser and stouter, these, however, being common sexual variations. The females (which measure but 4 mm.) also have the basal segment of abdomen flat, the hind tibiæ edentate, and are more robust.

MANDALOTUS SETICOLLIS, n. sp.

Male. Blackish; appendages dull-red. Upper surface (except pronotum) densely covered with sooty-brown scales,

variegated with numerous spots of slaty-grey scales. Densely clothed with long, thin, semidecumbent setæ; shorter, thinner, and denser on under than on upper surface. Tibiæ very feebly ciliated.

Rostrum with carina uncovered throughout. Antennæ thin; first joint of scape more than once and one-half the length of second. *Prothorax* somewhat flattened, sides strongly rounded in front, rather feebly behind; with dense, more or less rounded and flattened, shining granules, not at all concealed. *Elytra* conjointly feebly arcuate at base; with punctures much narrower than interstices, and their size not much altered in appearance by clothing; interstices regular, with minute, scattered, depressed granules, and which are quite invisible before abrasion. *Abdomen* densely granulate; two basal segments largely and conjointly concave, apical strongly convex. *Legs* stout, with feeble granules; front coxæ rather widely separated; tibiæ feebly curved, but strongly inflated at apex. Length, $5\frac{1}{2}$ -6 mm.

Female. Differs in being more robust, basal segments of abdomen rather strongly convex, and the apical less so, and the tibiæ straighter.

Hab.—Tasmania: Ulverstone (on sea-beach. A. M. Lea).

Of the two males before me, one has the head, rostrum, and apex of prothorax diluted with red, in the other these parts are as dark as elsewhere; in the only female no part of the derm is quite black. The pale spots of scales on the elytra are very numerous, and from certain directions appear to form feeble, much-interrupted, transverse lines. On abrasion the head is seen to have small scattered granules. The median prothoracic line is present on the female, but absent from the males.

Readily distinguished from most species by the entire absence of scales from the pronotum, although the setæ there are as dense as elsewhere. In the table it is placed near *reticulatus*, but the two species have little in common.

MANDALOTUS SIMILIS, n. sp.

Male. Black; antennæ and tarsi dull-red, other parts of the legs very obscurely diluted with red. Densely covered with muddy-brown scales. With subdecumbent setæ, mostly brown, but in places straw-coloured. Front tibiæ with long and moderately dense ciliation, the others very feebly ciliated, all the femora with long pale hair.

Rostrum stout; carina rather feeble, but distinct throughout. Antennæ rather thin. *Prothorax* about as long as wide; median line very narrow; with minute scattered granules, quite concealed normally. *Scutellum* small but distinct.

Elytra rather feebly arcuate at base, rather strongly diminishing in width from basal fourth; with large round punctures, distinctly wider than interstices, but appearing much smaller through clothing; interstices regular. Basal segment of *abdomen* feebly concave. *Legs* stout; front *coxæ* rather widely separated; front *tibiæ* rather strongly curved at apex. Length, $4\frac{1}{2}$ mm.

Female. Differs in being wider, punctures smaller, basal segment of abdomen rather strongly convex and *tibiæ* straighter.

Hab.—New South Wales: Forest Reefs (A. M. Lea).

In the only male before me the scales are quite uniform in colour, but in the female they are somewhat mottled, and the legs have feeble pale rings. The prothoracic sculpture is much as in *Fergusoni*, but the edentate hind *tibiæ* should prevent the two species from being confused together. In general appearance both sexes are much like those of *piliventris*, but the prothoracic granules are very different.

MANDALOTUS HUMERALIS, n. sp.

Male. Reddish-brown, appendages paler. Densely clothed with muddy-brown scales, and with rather sparse setæ. Front *tibiæ* very sparsely ciliated.

Antennæ rather stout. *Prothorax* moderately transverse, rather flat, sides strongly rounded; median line narrow; with numerous fairly large and rounded, but subobsolete, granules, not readily traceable through clothing. *Elytra* trisinate at base, rather suddenly inflated behind shoulders, and thence rather strongly decreasing in width to near apex; with rows of large punctures, usually twice the width of interstices, or even more, but often almost or quite concealed; interstices feebly thickened in places. Basal segment of *abdomen* gently concave. *Legs* stout; front *coxæ* rather widely separated; front *tibiæ* rather strongly curved at apex. Length, $3\frac{1}{4}$ mm.

Female. Differs in being larger and wider, less angular in appearance, abdomen gently convex throughout, and *tibiæ* straighter.

Hab.—New South Wales: National Park (in rotting leaves. A. M. Lea).

In both specimens before me the scales are without variation, but in places are obscured by dirt, as is so frequently the case with species living in decaying leaves. The setæ of the upper surface are rather sparse and irregularly distributed, and vary in colour from whitish to dark-brown. One specimen has the rostral carina entirely concealed, but in the other it is distinct (almost certainly through abrasion) in the middle.

Although placed in the table with the species having the elytra non-tuberculate, these organs certainly appear slightly swollen in places on the disc. The male is a peculiarly-rough, angular insect, but the female is quite normal-looking, and rather strongly resembles the female of *hoplostethus*.

MANDALOTUS AVENACEUS, n. sp.

Male. Densely covered with muddy-brown, feebly-mottled scales. With subdecumbent brownish setæ. Front tibix rather sparsely ciliated.

Rostrum with carina distinct throughout. *Antennæ* rather thin. *Prothorax* feebly transverse, sides strongly and regularly rounded; median line distinct; with minute scattered granules, almost or quite invisible before abrasion. *Elytra* rather feebly trisinate at base; subcordate; with rows of large rounded punctures, much wider than interstices, but appearing much smaller through clothing; interstices feebly alternately raised. *Abdomen* with basal segment gently concave. *Legs* stout; front coxæ rather widely separated; front tibix with a strong median ridge, ending posteriorly in a strong obtuse tooth. Length 3 mm.

Hab.—Victoria: Daylesford ("destroying oats." National Museum).

There are five specimens before me, but all are males; in most of them the elytra appear to be black, with the prothorax, antennæ, and tarsi reddish, and the other parts reddish-brown. The setæ, although fairly numerous, are very indistinct, except from the sides. The mottling on the prothorax appears to form very feeble stripes. In general appearance close to *arcuatus* and *trisinuatus*, but readily distinguished therefrom by the granules of prothorax, and the dentate front tibix.

MANDALOTUS ALBONOTATUS, n. sp.

Male. Black; under surface and appendages more or less red. Densely covered with muddy-brown scales, variegated in places with sooty and white or whitish scales. With stout semi-erect setæ, mostly dark-brown, but in places white or straw-coloured. Front tibix with rather short ciliation.

Rostrum with carina quite concealed, except at its tip. *Antennæ* thin. *Prothorax* rather feebly transverse, sides strongly rounded; median line distinct; with dense and fairly large but almost obsolete granules. *Scutellum* distinct. *Elytra* conjointly arcuate at base; with series of large, rounded punctures, the width of or wider than interstices, but apparently much narrower; alternate interstices feebly raised, the suture on its apical half more noticeably raised. *Abdo-*

men with numerous small granules, the basal segment somewhat concave. *Legs* stout; front coxæ widely separated; front tibiæ rather feebly bisinuate. Length, $4\frac{1}{2}$ -5 mm.

Hab.—Victoria: Apollo Bay (C. French).

The clothing of the under-surface (except at sides of sterna) consists entirely of rather fine setæ. On the five specimens before me there is always a distinct spot (or short stripe) of white scales on the third interstices at the base, and these are sometimes connected across the extreme base; the sides of the prothorax are usually marked with broken and irregular whitish stripes; there is also a distinct white spot at the side of each eye. The legs have more or less distinct whitish rings, usually two on each of the femora and tibiæ. The sooty scales may cover but a small portion of the derm or more than half. The prothoracic granules are scarcely traceable through the clothing, and when this has been removed are seen to be but very feebly elevated, and in fact the slight swellings should perhaps not be regarded as granules at all. The hind tibiæ at the lower inner edge are feebly ridged, and the ridge terminates rather suddenly at about one-third from the apex; but it is not distinct, and is quite invisible from most directions.

The two spots at the base of the elytra cause it to resemble several species, especially *simulator*, *carinativentris*, and *Blackmorei*, from all of which it may be distinguished by characters given in the table; *sterilis* ⁽⁴⁾ is apparently a narrower species, with the alternate interstices more strongly raised, and the abdomen and hind tibiæ different.

MANDALOTUS OCHREONOTATUS, n. sp.

Male. Of a dingy-brown: funicle, club, and parts of legs paler. Densely covered with sooty-brown scales, variegated in places. With stout, regularly-distributed, subdecumbent setæ, mostly dark-brown, but varying to white. Front tibiæ with rather short ciliation.

Rostrum much as in the preceding species. *Antennæ* somewhat stouter. *Prothorax* rather feebly transverse, sides very strongly rounded; median line very narrow, and usually concealed; with minute, scattered, and normally-concealed granules. *Elytra* conjointly arcuate at base: with series of large, rounded punctures, usually distinctly wider than interstices, but appearing much smaller through clothing; interstices regular. *Abdomen* with basal segment flat, or very slightly concave in middle. *Legs* strong; front coxæ moderately separated; front tibiæ moderately trisinuate. Length, $4\frac{1}{2}$ (female. 5) mm.

(4) According to Mr. Blackburn's notes on the type in these "Transactions" for 1901, p. 27.

Female. Differs in being larger and wider, elytra more rounded, abdomen more convex, and tibiæ straighter.

Hab.—New South Wales: Muswellbrook (E. W. Ferguson).

More or less ochreous scales cover the rostrum, parts of the head, sides of the prothorax (and usually a small discal spot), and the fourth interstices near the base; the legs are feebly ringed, the rings varying from whitish to ochreous. Towards the apex of the elytra the scales are mottled-grey and sooty, the mottling variable. The spot on the fourth interstice of each elytron appears sometimes as a stripe confined to that interstice, and extending from the base to about two-fifths from the base; sometimes it appears in a more rounded and isolated form, and extends to the third and fifth interstices; and it varies considerably in size, but on the five specimens before me it is always present and sufficiently conspicuous. The prothoracic granules are much as in *similis*, from which species, however, it is readily distinguished by the ciliation of the front tibiæ of the male. The colours, both of derm and scales, are also different.

MANDALOTUS MACULATUS, n. sp.

Male. Black, appendages and apex of abdomen red. Moderately clothed with greyish and darker scales; legs feebly ringed. Setæ subdecumbent, rather sparse, and varying from white to dark-brown. Front tibiæ scarcely ciliated.

Rostrum with carina uncovered at tip only, but traceable throughout. *Antennæ* thin; club comparatively large. *Prothorax* flattened; moderately transverse, sides rather suddenly lessened towards base and apex; median line feeble; densely and rather coarsely punctured. *Elytra* rather indistinctly trisinate at base, considerably wider than prothorax, sides subparallel to apical third; with series of large rounded punctures, about the width of interstices, but appearing much smaller through clothing; interstices feebly alternately raised. *Abdomen* with basal segment almost flat in middle. *Legs* stout; front coxæ touching; front tibiæ rather feebly trisinate. Length, $3\frac{1}{2}$ mm.

Female. Differs in being more robust, basal segment of abdomen quite distinctly convex, and tibiæ straighter.

Hab.—Tasmania: Hobart, Mount Wellington, Bruny Island, Huon River (A. M. Lea).

In some specimens the apex of the rostrum and of the prothorax and the whole of the abdomen are more or less reddish. The clothing is less dense than usual, and the pale scales on the elytra appear as feeble spots; both shape and markings are very suggestive of *Desiantha maculata*. The prothoracic

punctures are greatly obscured before abrasion, and in places are replaced by rather feeble granules. The sutures of the third and fourth abdominal segments are deeper and wider than usual, but are the same as in the following species.

MANDALOTUS INUSITATUS, n. sp.

Male. Black; antennæ, tarsi, apex of tibiæ, base of femora, and the trochanters reddish. Moderately clothed with greyish and darker scales. With fairly numerous semi-erect, and mostly dark, setæ. Four front tibiæ rather feebly, the hind rather strongly, ciliated.

Rostrum with carina uncovered on apical half. *Antennæ* thin. *Prothorax* flattened in middle, moderately transverse, sides strongly rounded; median line absent; with numerous granules scattered about amongst punctures, both more or less concealed normally. *Elytra* conjointly arcuate at base; with series of punctures narrower than interstices on basal half, and much narrower posteriorly, and usually almost or quite concealed; interstices very feebly alternately raised, and with minute, scattered, concealed granules. *Abdomen* with basal segment gently concave. *Legs* stout, especially the front femora; front coxæ touching; front tibiæ rather strongly bisinuate below, and thinner than usual. Length 3 (female, 3 $\frac{3}{4}$) mm.

Female. Differs in being stouter, basal segment of abdomen gently convex, and the front tibiæ shorter and straighter.

Hab.—Tasmania: Hobart, Mount Wellington, Stonor, Huon River (under logs. A. M. Lea).

In general appearance close to the preceding species, but with the club darker, the elytral spots absent or less distinct, and the setæ more numerous and more erect. But it may be readily distinguished from that, and from all other species known to me, by the ciliation of the hind tibiæ being much stronger than that of the front pair, a character which is also not confined to the male (I can be certain of this, having taken a pair *in cop*). In two specimens there are feeble rings on the femora, but these are not traceable in nine others. Specimens are usually very muddy when obtained.

MANDALOTUS BLACKMOREI, n. sp.

Male. Reddish-brown or black; antennæ, tarsi, and other parts of legs paler than elsewhere. Densely covered with muddy- or sooty-brown scales, more or less variegated with whitish or blackish scales. With moderately dense, sub-decumbent setæ, frequently white, but varying to dark-brown.

Rostrum with carina uncovered throughout. *Antennæ* rather thin. *Prothorax* very feebly transverse, sides strongly

rounded; median lines and granules very feeble. *Elytra* conjointly arcuate at base; with series of large round punctures, about the width of interstices, but appearing much smaller through clothing; interstices regular. *Abdomen* with basal segment gently concave. *Legs* stout, especially front femora; front coxæ moderately separated; front tibiæ moderately bisinuate beneath. Length, $4\frac{1}{4}$ - $4\frac{3}{4}$ mm.

Female. Differs in being more robust, abdomen convex throughout, tibiæ straighter, etc.

Hab.—New South Wales: Forest Reefs (Albert Blackmore and A. M. Lea).

The derm of the elytra, the throat, and other parts of the under surface are sometimes quite black; but as a rule these parts are of a dark-brown, although usually darker than elsewhere; the prothorax is very rarely black. The scales are often rather strongly variegated, and there is usually a distinct white spot on the third interstice at base, and also at the side of each eye, somewhat as in *albonotatus*. On some specimens the scales are almost entirely dark, with more or less conspicuous whitish spots. The clothing of the abdomen consists of rather dense setæ, but with scales at the sides of the two basal segments. The front coxæ are very distinctly separated, but the distance between them is less than in most species, and is less in the male than in the female. It is, however, slightly more than in *pallidus* and *suturalis*, which species have been referred to another section in the table.

The prothoracic granules, although individually rather large, are quite invisible before abrasion, and are even more feeble than in *albonotatus*; in fact, from some directions the prothorax, even after abrasion, appears to be without them, but in certain lights very fine lines can be seen marking their edges; *albonotatus*, which it strongly resembles, has the prothorax larger, with a more distinct median line, the front coxæ more, and the middle coxæ much more, widely separated, the abdominal clothing sparser; and is altogether more robust. The mandibular appendages are present on one female before me. and are long, thin, and curved, much as in many species of *Leptops*.

SUB-FAMILY EURHYNCHIDES.

CTENAPHIDES GYMNOSTICTUS, n. sp.

Female. Dark reddish-brown. Densely covered with whitish setæ-like scales, almost uniform in distribution, except that the apical half of the rostrum is nude, and that there are nude spots forming rows on the alternate interstices of the elytra, the spots being more numerous on the sutural interstice than on the others.

Head with numerous and rather coarse, but partially-concealed, punctures; ocular fovea narrow and elongate. *Rostrum* rather thin, almost twice the length of head, feebly increasing in width to base and apex, rather coarsely punctured throughout, and with a very feeble median carina on the basal half. Antennæ inserted almost in exact middle of sides of rostrum, first-sixth joints subcylindrical, second slightly longer than third, and thinner, but not much shorter than first, seventh-eighth subtransverse, shorter and wider than the preceding joints, ninth-eleventh still wider and forming a club, the length of which is equal to the six preceding joints combined, eleventh as long as eighth-tenth combined. *Prothorax* feebly transverse, strongly convex, sides strongly rounded, but with somewhat sinuous outlines; with dense and rather coarse, but partially-concealed, punctures. *Elytra* about four times the length of prothorax, parallel-sided to near the apex, strongly convex, interstices rather strongly elevated, the alternate ones somewhat wider than the others: striæ with fairly large, but more or less concealed, punctures. *Under surface* with dense, rather small, and partially-concealed punctures. *Legs* rather short. Length (including rostrum), 22 mm.

Hab.—Western Australia: King George's Sound (type in Macleay Museum).

In general appearance something like the female of *Eurhynchus levior*, but differs in being larger, prothorax much wider, rostrum straighter, second joint of antennæ longer, instead of shorter, than third, etc.

There are two specimens (sexes) of this species in the Australian Museum; the male differs from the female in being smaller, with the rostrum shorter, stouter, and more coarsely punctured. The antennæ are inserted closer to apex of rostrum, the second-ninth joints are provided with wide, flange-like extensions, rather than rami, the tenth is also produced, but in profile appears triangular (the second-tenth on the produced parts are hairy), the eleventh is almost the length of the three preceding combined, narrower than any of the others, and constricted and strongly curved just before the middle. The extensions of the antennæ are much shorter than in *porcellus*, and are longest at about the middle, instead of gradually elongating to the ninth, the eleventh is longer than in *porcellus*, but otherwise much the same.

This genus has hitherto been known only from the male of *C. porcellus*; but the examination of both sexes of the present species suggests to me the possibility that *Ctenaphides* should be regarded as a subgenus of *Eurhynchus* only. There are certainly no generic features by which the females of it and of *Eurhynchus* can be distinguished.

SUB-FAMILY CIONIDES.

NANOPHYES.

The peculiar shape and five-jointed funicle render this genus a very distinct one: hitherto but one species has been recorded from Australia.

NANOPHYES MAURUS, Pasc.

There is a specimen before me, from Sydney, which possibly belongs to this species; it differs from the description, however, in having the scape and basal joint of funicle (not flavous, but) of a very dark red, the base and apex of tibiæ are similarly coloured, and the sides of the prothorax in certain lights appear to be diluted with red.

NANOPHYES ALLENI, n. sp.

Male. Black; base of femora flavous; funicle, scape, base and apex of tibiæ and parts of tarsi of a more or less dull red. Moderately clothed with whitish pubescence, denser on sides of sterna than elsewhere.

Rostrum thin, not quite as long as head and prothorax combined, grooved behind antennæ (which are inserted at apical third) and dilated in front of them, with punctures throughout. *Prothorax* transverse, sub-conical; with sparse partially-concealed punctures. *Elytra* punctate-striate, the interstices regularly convex, and with indistinct punctures. *Femora* bidentate, the large tooth very thin and sharp, the smaller scarcely traceable. Length (excluding rostrum), 2 mm.

Female. Differs in being larger, rostrum fully the length of head and rostrum combined, grooves less distinct, and punctures smaller and sparser, especially towards the apex; the antennæ also are inserted nearer to the middle.

Hab.—Queensland: Cairns (Edmund Allen).

Differs from the preceding species by its slightly larger size, longer rostrum, and very decidedly longer femoral teeth. The clothing on the elytra of five specimens shows no tendency whatever to form a V.

NANOPHYES V-NOTATUS, n. sp.

Female. Black; base of femora flavous, tibiæ almost flavous, but slightly infusate in middle; scape, funicle, and parts of tarsi of a dull red. Clothed with greyish pubescence, denser on sides of sterna than elsewhere, and forming a distinct V on elytra.

Rostrum thin, the length of head and prothorax combined, with a few feeble punctures in front of antennæ (which are inserted at apical two-fifths), but with distinct

punctures and grooves behind. *Femora* as in the preceding species. Length, 2 mm.

Hab.—New South Wales: Nepean River (A. J. Coates), Sydney (H. J. Carter).

Readily distinguished from *maurus* and *Alleni* by the white elytral V; the arms of this commence near each shoulder and become conjoined on suture before the middle. A somewhat abraded male, evidently belonging to this species, differs in having the rostrum shorter, stouter, more coarsely punctured, and with the antennæ inserted closer to the apex.

I have not described the prothorax and elytra in this and the two following species, as they are much the same as in *Alleni*.

NANOPHYES NIGROVARIUS, n. sp.

Flavous, in places becoming dull-red; head, club, meso- and metasternum and abdomen black or blackish, base of rostrum and funicle more or less infuscate. Clothed with whitish pubescence, denser on sides of sterna and of abdomen than elsewhere, and with a tendency to form a V on the elytra.

Rostrum and antennæ of both sexes much as in *Alleni*, and *femora* the same. Length, 2-2½ mm.

Hab.—New South Wales: Nepean River (A. J. Coates), Clarence River (A. M. Lea).

The elytral V is in the same position as in the preceding species, but is not quite so pronounced.

A specimen from Brisbane is probably a variety; it differs in being dull red, in having the rostrum entirely black, the suture black at the base (in one of the types it is infuscate at the base), and the sides of the elytra and middle of femora infuscate.

NANOPHYES PALLIDICORNIS, n. sp.

Female(?). Flavous; in places slightly reddish or slightly infuscated. Sparsely clothed with greyish pubescence, and forming a feeble V on elytra.

Rostrum thin, parallel-sided, slightly longer than prothorax, with grooves and punctures behind, and a few punctures in front of antennæ, these inserted at apical two-fifths. *Femora* very feebly bidentate. Length, 1½ mm.

Hab.—New South Wales (Macleay Museum): Forest Reefs (A. M. Lea).

Smaller and wider than any other species tabulated below. The pale club and under surface will readily distinguish it from *nigrovarius*: the elytral V is no more conspicuous than in that species, but on one of the specimens there is a faint row of slightly-darkened spots before and another

behind it; on the second specimen the posterior spots are wanting.

Prothorax and elytra black.

Elytra with pubescence forming a distinct					
V	...	...	...	...	<i>V-notatus</i> , n. sp.
Elytra without such a V.					
Femoral dentition feeble	...	...	...	...	<i>maurus</i> , Pasc.(?)
Femoral dentition acute	...	...	...	...	<i>Alleni</i> , n. sp.
Prothorax and elytra not black.					
Sterna and abdomen more or less black	...	...	...	...	<i>nigrovarius</i> , n. sp.
Sterna and abdomen pale	...	...	...	...	<i>pallidicornis</i> , n. sp.
